

CLAIMS

What is claimed is:

- 1 1. A removable access panel system, comprising:
2 a frame suitable for containing an electronic component including an aperture therein,
3 said frame further including at least one pocket adjacent to said aperture, wherein
4 said at least one pocket includes an arced surface protruding generally into the
5 pocket from a side of the pocket generally opposite the aperture;
6 a panel door capable of rotating to obtain an open position and a closed position, the
7 panel door including;
8 at least one extension with a generally arced surface suitable for being accepted
9 into the at least one pocket; and
10 a securing mechanism capable of securing the panel door to the frame in the closed
11 position.
- 1 2. The removable access panel system of claim 1, further comprising a means for
2 aligning the panel door to the frame.
- 1 3. The removable access panel system of claim 1, wherein the pocket is disposed
2 generally below the aperture when the removable panel access system is aligned with
3 gravity.
- 1 4. The removable access panel system of claim 1, wherein the panel door is
2 capable of self-extracting itself in the open position.
- 1 5. The removable access panel system of claim 1, wherein the at least one
2 extension includes tapers on two surfaces of the extension generally perpendicular to

3 the arced surface, wherein the at least one pocket includes corresponding tapered
4 structures for accepting the at least one extension.

1 6. The removable access panel system of claim 1, wherein the securing
2 mechanism is at least one of a latch, a screw, a slide lock, and a twist lock.

1 7. The removable access panel system of claim 1, wherein the securing
2 mechanism is disposed on an opposite end of the panel door than the at least one
3 extension.

1 8. The removable access panel system of claim 1, wherein the panel door is
2 capable of electromagnetic shielding the electronic component when in the closed
3 position.

1 9. The removable access panel system of claim 1, wherein the panel door is
2 suitable for preventing the ingress of debris into the aperture, in the closed position.

1 10. A removable self-extracting panel system, comprising:
2 a frame for containing an electronic component including an aperture therein, said
3 frame further including at least one pocket adjacent to said aperture, wherein said
4 at least one pocket includes an arced surface protruding generally into the pocket
5 from a side of the pocket generally opposite the aperture, whereby the innermost
6 protrusion of the arced surface occurs at the outer surface of the frame;
7 a panel door capable of rotating to obtain an open position and a closed position, the
8 panel door including;
9 at least one extension with a generally arced surface suitable for being accepted
10 into the at least one pocket;

11 a securing mechanism capable of securing the panel door to the frame in the closed
12 orientation; and
13 wherein the panel door is capable of self-extracting itself in the open position.

1 11. The removable access panel system of claim 10, further comprising a means
2 for aligning the panel door to the frame.

1 12. The removable access panel system of claim 10, wherein the at least one
2 extension includes a taper on the sides of the extension generally perpendicular to the
3 arced surface, wherein the at least one pocket includes corresponding tapered
4 structures for accepting the at least one extension.

1 13. The removable access panel system of claim 10, wherein the securing
2 mechanism is at least one of a latch, a screw, a slide lock, and a twist lock.

1 14. The removable access panel system of claim 10, wherein the securing
2 mechanism is disposed on an opposite end of the panel door than the at least one
3 extension.

1 15. The removable access panel system of claim 10, wherein the panel door is
2 capable of electromagnetic shielding the electronic component when in the closed
3 position.

1 16. The removable access panel system of claim 10, wherein the panel door is
2 suitable for preventing the ingress of foreign debris into the aperture, in the closed
3 position.

1 17. A removable access panel system, comprising:

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2 a means for containing an electronic component including a means for accessing said
 3 electronic component therein, wherein said containing means further includes
 4 a means for accepting adjacent to said accessing means, said accepting means
 5 including an arced surface protruding into said accepting means from a side of
 6 the accepting means generally opposite said accessing means;
 7 a means for covering said accessing means, said covering means capable of rotating
 8 to obtain an open position and a closed position, wherein said covering means
 9 includes at least one extension with a generally arced surface suitable for
 10 being accepted into said accepting means; and
 11 a securing means capable of securing said covering means to said containing means in
 12 the closed position.

1 18. The removable access panel system of claim 17, further comprising a means
 2 for aligning the covering means to the containing means.

1 19. The removable access panel system of claim 17, wherein the accepting means
 2 is disposed generally below the accessing means when the removable panel access
 3 system is aligned with gravity.

1 20. The removable access panel system of claim 19, wherein the covering means
 2 is capable of self-extracting itself in the open position.

1 21. The removable access panel system of claim 19, wherein the at least one
 2 extension includes tapers on two surfaces of the extension generally perpendicular to
 3 the arced surface, wherein the accepting means includes corresponding tapered
 4 structures for accepting the at least one extension.

1 22. The removable access panel system of claim 19, wherein the securing means
2 is disposed on an opposite end of the covering means than the at least one extension.

1 23. The removable access panel system of claim 19, wherein the covering means
2 is capable of electromagnetic shielding the electronic component when in the closed
3 position.

1 24. The removable access panel system of claim 19, wherein the covering means
2 is suitable for preventing the ingress of debris into the aperture, in the closed position.

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